



Position Title: Senior Software Developer

Reports To: Chief Technology Officer (CTO), Compute Canada **Job Type:** Full-time for 2 years with possibility for extension

Location: Anywhere in Canada with good internet and reasonable access to air

travel

Website: www.computecanada.ca

Compute Canada, in partnership with regional organizations ACENET, Calcul Québec, Compute Ontario and WestGrid, leads the acceleration of research innovation by deploying state-of-the-art advanced research computing (ARC) systems, storage and software solutions. Together we provide essential ARC services and infrastructure for Canadian researchers and their collaborators in all academic and industrial sectors. Our world-class team of more than 200 experts employed by 35 partner universities and research institutions across the country provide direct support to research teams. Compute Canada is a proud ambassador for Canadian excellence in advanced research computing nationally and internationally.

Job Summary

Compute Canada is seeking a full time senior software developer to work on common services to support storage, management, and analysis of research data. In particular, the senior developer will work closely with other Compute Canada team members and staff at the Canadian Astronomy Data Centre (CADC) to develop software solutions relevant to astronomical data as part of a co-development project with CADC

Functions & Responsibilities

- Reporting to the CTO, the Senior Software Developer will have the following responsibilities:
- Leading the design of software solutions which leverage common Compute Canada services to serve astronomy use-cases
- Participate in the development of new services supporting Compute Canada's Advanced Research Computing strategy.
- Interacting with various Compute Canada technology teams related to storage, networking, cloud operations and others to ensure that the engineered software solution takes advantage of Compute Canada platform developments



- Interacting with the CADC development team to ensure that user requirements are satisfied
- Significant software development
- Quality control, testing and documentation of software solutions

Requirements

The successful candidate should have the following education, skills and abilities:

- Bachelor's Degree in Computer Science or equivalent in combination of skills and experience
- 10+ years of experience as a Software Developer
- Experience with agile development methodologies
- Experience with software development in Linux/Unix environments
- Experience in REST API design and development
- Broad experience in software planning, testing, and change management
- Ability to work with mixed programming languages, including Ruby on Rails, in Webdriven environments and back-end systems.
- Familiar with authentication and authorization mechanisms including LDAP, PAM/SSSd;
 able to participate in formation of federated identity management mechanisms
- Able to develop and execute regression testing and quality control mechanisms for software
- Strong interpersonal skills and the ability to work successfully with a variety of personalities
- Strong attention to detail
- Ability to prioritize and manage time efficiently
- Ability to work effectively individually and as part of a team

Compute Canada utilizes a broad mix of languages, development tools and platforms.

All infrastructure services are hosted on Linux platforms (RHEL/Centos and Ubuntu). Git is typically used for source code management and versioning. Back-end databases include MySQL and PostgreSQL. Application layers are written using Ruby on Rails, Python, Perl, and other languages. Interfaces to authentication systems rely on LDAP. CADC, like the rest of Compute Canada's back-end software infrastructure, makes extensive use of cloud-based and virtualized environments. This includes some high availability and failover features. Developers maintain skills in these and other technologies, and rely on other team members for additional expertise.



The following skills and abilities are not required but would be an asset:

- Interest in advanced computing technology and research
- Experience with scientific or research-oriented projects
- Previous experience working in a home office environment

How to Apply

Interested candidates should send their resume and cover letter via email to hr@computecanada.ca indicating name of the position of interest in the title. We thank all applicants, however, only those selected for an interview will be contacted.